User Panel: How We Implemented Collaborative Robots

Mark Lewandowski
Procter & Gamble
Agenda

• P&G At a Glance
• Why Use Collaborative Robots?
• Selecting Applications for Cobots
• Issues and Barriers
P&G At a Glance

- $76B in sales
- 21 brands with annual sales > $1B
- 11 brands with annual sales $500M - $1B
- Consumers in more than 180 countries
Why Use Collaborative Robots?

• Robots are cool!

• Collaborative robots are even cooler!
The Debate

Robots vs Humans
And The Winner Is...

You and Your Business!
Why Use Collaborative Robots?

• Simple to implement and use

• Advantages in:
  – Cost of implementing
    • “Cage-Free” Robotics
      – Eliminates guarding
      – Reduces Floor Space
    • Reduced Engineering Costs
  – Flexibility
    • Adaptive and reconfigurable
      – Easy and intuitive programming
    • Portable
      – Move robot to the applications as needed
Selecting Applications - General

For Robotics in General

• Look for processes and tasks that are:
  – Dull
  – Dirty
  – Dangerous/Ergonomic Issues
Selecting Applications - Cobots

Where to Look for Collaborative Applications

- Simple applications
- Highly manual processes
- Similar processes/tasks that are not fully utilized 24/7
Key Collaborative Advantage

Enables partial automation opportunities where it was “All or Nothing”
Successful Application Features

Cobots provide value and succeed when:

- Low speed - 6-8 cycles per min
- Low payload - less than 10kg typically
- Little or no robotics expertise available
- Processes/Machinery with Low Utilization
- Processes previously seen as uneconomical or too complex where partial automation may be feasible or desirable
Issues and Barriers

• Acceptance
  – Safety
  – Taking Jobs

• Unrealistic Promises & Expectations

• Safety requirements not well understood
  – How to ensure compliance to new and changing standards

• Rate and Payload Limitations

• Cost
Contact

Mark Lewandowski
Robotics Network Innovation Leader
Procter & Gamble
West Chester, OH USA
+1 (513)634-9011
lewandowski.ml@pg.com